RAW SEQUENCE LISTING PATENT APPLICATION US/08/971,172

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This Raw Listing contains the General Information Section and up to the first 5 pages.

1	SEQUENCE LISTING
2	The Mark that the transfer tha
3	(1) General Information: ENTERED
4	(1) APPLICANT: Goodman, Corey S.
5	Kidd, Thomas
6	Mitchell, Kevin
7	Tear, Guy
8 9	(ii) TITLE OF INVENTION: Robo: A Novel Family of Polypeptide and Nucleic Acids
10	(iii) NUMBER OF SEQUENCES: 12
11	(iv) Correspondence Address:
12	(A) ADDRESSEE: SCIENCE & TECHNOLOGY LAW GROUP
13	(B) STREET: 75 DENISE DRIVE
14	(C) CITY: HILLSBOROUGH
15	(D) STATE: CALIFORNIA
16	(E) COUNTRY: USA
17	(F) ZIP: 94010
18	(v) COMPUTER READABLE FORM:
19	(A) MEDIUM TYPE: Floppy disk
20	(B) COMPUTER: IBM PC compatible
21	(C) OPERATING SYSTEM: PC-DOS/MS-DOS
22	(D) SOFTWARE: PatentIn Release #1.0, Version #1.30
23	(vi) CURRENT APPLICATION DATA:
24	(A) APPLICATION NUMBER:
25	(B) FILING DATE:
26	(C) CLASSIFICATION:
27	(viii) ATTORNEY/AGENT INFORMATION:
28	(A) NAME: OSMAN, RICHARD A
29	(B) REGISTRATION NUMBER: 36,627
30	(C) REFERENCE/DOCKET NUMBER: B98-006
31	(ix) TELECOMMUNICATION INFORMATION:
32	(A) TELEPHONE: (650) 343-4341
33	(B) TELEFAX: (650) 343-4342
34	
35	(2) INFORMATION FOR SEQ ID NO:1:
36	(i) SEQUENCE CHARACTERISTICS:
37	(A) LENGTH: 4188 base pairs
38	(B) TYPE: nucleic acid
39	(C) STRANDEDNESS: double
40	(D) TOPOLOGY: linear
41	(ii) MOLECULE TYPE: cDNA
42	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1: ATGCATCCCA TGCATCCCGA AAACCACGCC ATCGCCCGGA GCACGAGCAC CACTAATAAC 60
43 44	ATGCATCCCA TGCATCCCGA AAACCACGCC ATCGCCCGGA GCACGAGCAC CACTAATAAC 60 CCATCTCGCA GTCGGAGCAG CAGGATGTGG CTCCTGCCCG CCTGGCTGCT CCTCGTCCTG 120
44 45	GTGGCCAGCA ATGGCCTGCC AGCAGTCAGA GGCCAGTACC AATCGCCACG TATCATCGAG 180
46	CATCCCACGG ATCTGGTCGT TAAGAAGAAT GAACCCGCCA CGCTCAACTG CAAAGTGGAG 240
40	CATCUCACGG ATCTGGTCGT TANGANGNAT GANCCCGCCA CGCTCAACTG CAAAGTGGAG 240

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47	CCC X X CCCCC	AACCCACCAT	TO A CTO COTTO	3 3 CC 3 TC CC C			300 300
48		ACCGCGTCCA					360
49		AGCAGGACGG					420
50		GCCATGCCTC					480
51		CGCGAGTGGC		- · · · · · · · · · · · · · · · · · · ·		GCCGCCCAAA	540
52		AGCCAACGCT		AAGGACGGCG		CGACCTGAAA	600
53		TTGGCGCCAG AGCCCATTGA				TCTGGTAGGC	660 720
54							720 780
55		GCAGCTATGC					840
56 57		AGGTGATGCT CGAAAGTGTT	GTGGAAAAAG			AGTGGGCGGT	900
58		ACGACGAGAA GCGAGGCACA					960
59						TTCTCTTATA	1020
60		CGCCGAACTT					1080
61		TACCTTGCAT				CTGGACCAAG	1140
62			GTTCCCAAAT				1200
63			GGATGTGCGG				1260
64	GCTTTCAGTG		CTCTACAGTA		TGCAAGTCAG		1320
65		CTCCGATTAT		CCTGCCAATC			1380
66		TACCCTGTCG		AATCCCAGTC			1440
67		CCGTACAAGC					1500
68		TTCAACTAAG		ACCTACACCT			1560
69		CCTGGGCTGC					1620
70			TTATCCTGCT				1680
71		GCATTAGTCT		AAAAGCCAAG			1740
72		GATACACTGT					1800
73		GAGTCGGCGA				TGGCACTTCG	1860
74			TGAGAATACT				1920
75 76		AAACCATTGA					1980
76		TGCTGACAGG					2040
77 78		GACTTGAGTG					2100 2160
		ACTATAAGGA					
79			GTTTGTGGTG				2220
80 81		CACCCTTTTT	CTCCGCACCA	GAAGGACAGC			2280 2340
82		GTTGGGTGCG AGATTGAGGT		CCACCCTCCC			2400
83				AACACCATGA			2460 2520
84 85		CCACCACATC	CAAGGCAGGA	AATAACCTAA			2520
86		CCACCCATCA					2640
87 88		AGGGACAGGA					2700 2760
89		CCACTCATAA TCGTTCTTCT					2820
90		ATCAAATGAC					
91		TAAATATCAA					2880
							2940
92 93		ATACTGACAA					3000
93 94		AATCCAACTA					3060
94 95		TTACCACCTT					3120
95 96		TGATCATTGG AGGACTCGGG					3180
96 97							3240
97 98		CTGTTGTCAA					3300
99		TACCCCCCCC					3360
27	CAAGGATCTC	CTGAATCTTC	GCGGAAGAGC	ICCAMAAGCG	CAGGITCCGG	CATTICTACA	3420

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100	AATCAAAG																3480
101	GGAGTATC																3540
102	TCGGCAGT																3600
103	CCACAGTT.	AC C	3GCC'	racti	TG	CCAC	CACG	GGT	CCAG	GAG	GAGC'	rgta(CC A	CCCA	ACCA	C	3660
104	CTGCCATT'	TG C	CACA	CAGC	TC	ATGC	AGCC	AGC	SAGT	ACC	AGGC'	rgga(CT G	AATG	CAGC	3	3720
105	CGATGTGC	CC A	AAGC	CGCGC	CTC	GCAA	CAGC	TGC	GATG	CCT	TGGC	CACA	CC C	rcgc	CCAT	3	3780
106	CAACCCCC	AC C	GCCA	GTTC	CG'	TACC	CGAG	GGC'	rggt	ACC	AACC	GTG	CA TO	CCCA	ATAG	3	3840
107	CACCCGAT	GC A	CCCG	ACCTO	CT	CCAA	CCAC	CAG	ATCT	ACC	AGTG	CTCC'	rc co	SAGT	GCTC	3	3900
108	GATCACTC	GA G	GAGC'	TCGC	GA	GTCA	CAAG	CGG	CAGC!	rgc	AGCT	CGAG	GA G	CACG	GCAG	2	3960
109	AGTGCCAA.																4020
110	GAGAGCGA																4080
111																	4140
112	TGCAATAGCT CCCGCGAGG CGACACCTGC TCCTGCAGCG AGGGATCCTG TCTTTACGCC												-	4188			
113														4100			
114																	
	• •				_			~ .									
115	(1)			E CHA					.								
116		• •	•	NGTH:				acı	ıs								
117			•	PE: a													
118			-	RANDE			_	re									
119				POLOG													
120	(ii)				_												
121				E DES													
122	Met	His	Pro	Met	His	Pro	Glu	Asn	His	Ala	Ile	Ala	Arg	Ser	Thr	Ser	
123	1				5					10					15		
124	Thr	Thr	Asn	Asn	Pro	Ser	Arg	Ser	Arg	Ser	Ser	Arg	Met	Trp	Leu	Leu	
125				20			_		25			_		30			
126	Pro	Ala	Trp	Leu	Leu	Leu	Val	Leu	Val	Ala	Ser	Asn	Glv	Leu	Pro	Ala	
127			35					40					45				
128	Val	Arq	Glv	Gln	Tvr	Gln	Ser	Pro	Ara	Ile	Ile	Glu	His	Pro	Thr	Asp	
129		50	2		- 4 -		55		3			60					
130	Leu		Val	Lvs	Lvs	Asn		Pro	Ala	Thr	Leu	- •	Cvs	Lvs	Val	Glu	
131	65			-1-	-1-	70					75		-] -	-1-		80	
132		I.vs	Pro	Glu	Pro		Tle	Glu	Trn	Phe	Lys	Asn	Glv	Glu	Pro		
133	CLY	Lys	110	Olu	85		116	GIU	пр	90	шуз	АЗР	GLY	514	95	Val	
134	Sor	Thr	λen	Glu		Tue	Sor	Hic	Ara		Gln	Dha	Tue	Nen		λla	
135	Ser	1111	ASII	100	цуз	БУЗ	261	1113	105	Val	GIII	FIIE	Lys	110	GTA	ATG	
136	T ou	Dho	Dho		3 ~~	mb ~	Wat	71 5		T	Lys	a1	a1 n		a1	al.	
	rea	Pne		Tyr	Arg	THE	мес		GTÅ	гÀг	Lys	GIU		ASP	GTA	GIA	
137	a1	m	115	a	7		-	120	•	1	~ 3	~ 3	125				
138	GIU										Gly			vaı	ser	Arg	
139	•			_								140		_			
140		Ala	Ser	Leu	GIn		Ala	Val	Leu	Arg	Asp	Asp	Phe	Arg	Val		
141	145					150					155					160	
142	Pro	Lys	Asp	Thr	Arg	Val	Ala	Lys	Gly	Glu	Thr	Ala	Leu	Leu	Glu	Cys	
143					165					170					175		
144	Gly	Pro	Pro	Lys	Gly	Ile	Pro	Glu	Pro	Thr	Leu	Ile	Trp	Ile	Lys	Asp	
145	_			180	_				185				_	190	-	_	
146	Gly	Val	Pro	Leu	Asp	Asp	Leu	Lys	Ala	Met	Ser	Phe	Gly	Ala	Ser	Ser	
147	•		195		-	•		200					205				
148	Ara	Val		Ile	Val	Asp	Glv		Asn	Leu	Leu	Ile		Asn	Val	Glu	
149	5	210	- /- 3		-	E	215	-1				220					
150	Pro		Asn	Glu	G] v	Asn		Lvs	Cvs	Tle	Ala		Asn	I.em	Val	Glv	
151	225				1	230	- 1 -	-,5	- 75	-10	235	O-111		Lou		240	
152		Δrα	יינט	Ser	Ser		Δls	T.ve	Leu	Tlo	Val	al n	۲۵۷	Luc	Dro	-	
132	1111	AL Y	GIU	PEI	SEI	TYL	VTQ	בעניי	n e u	TTG	AGT	GTII	val	пуз	FIO	TYL	

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153					245					250					255	
154	Phe	Met	Lvs	Glu		Lvs	Asp	Gln	Val	_	Leu	Tvr	Glv	Gln		Ala
155			-,-	260		-1-			265			-1-	1	270		
156	Thr	Phe	His		Ser	Val	Glv	Glv		Pro	Pro	Pro	Lvs		Leu	Trp
157			275	-7			1	280					285			
158	ī.vs	Lys		Glu	Glv	Asn	Ile		Val	Ser	Ara	Ala		Ile	Leu	His
159	-1-	290			1		295				5	300	5			
160	Asp	Glu	Lvs	Ser	Leu	Glu		Ser	Asn	Ile	Thr		Thr	Asp	Glu	Glv
161	305		-3-			310					315					320
162		Tyr	Val	Cvs	Glu		His	Asn	Asn	Val		Gln	Ile	Ser	Ala	
163		- , -		-7-	325					330	1				335	5
164	Ala	Ser	Leu	Ile		His	Ala	Pro	Pro		Phe	Thr	Lvs	Ara	Pro	Ser
165				340					345					350		
166	Asn	Lys	Lvs		Glv	Leu	Asn	Glv	Val	Val	Gln	Leu	Pro	Cvs	Met	Ala
167			355					360					365	•		
168	Ser	Gly	Asn	Pro	Pro	Pro	Ser	Val	Phe	Trp	Thr	Lys	Glu	Gly	Val	Ser
169		370					375			-		380		-		
170	Thr	Leu	Met	Phe	Pro	Asn	Ser	Ser	His	Gly	Arq	Gln	Tyr	Val	Ala	Ala
171	385					390				•	395		-			400
172		Gly	Thr	Leu	Gln	Ile	Thr	Asp	Val	Arq	Gln	Glu	Asp	Glu	Gly	Tyr
173	-	-			405			-		410			•		415	-
174	Tyr	Val	Cys	Ser	Ala	Phe	Ser	Val	Val	Asp	Ser	Ser	Thr	Val	Arg	Val
175	-		•	420					425	•				430	_	
176	Phe	Leu	Gln	Val	Ser	Ser	Val	Asp	Glu	Arg	Pro	Pro	Pro	Ile	Ile	Gln
177			435					440		•			445			
178	Ile	Gly	Pro	Ala	Asn	Gln	Thr	Leu	Pro	Lys	Gly	Ser	Val	Ala	Thr	Leu
179		450					455			_	_	460				
180	Pro	Cys	Arg	Ala	Thr	Gly	Asn	Pro	Ser	Pro	Arg	Ile	Lys	Trp	Phe	His
181	465					470					475					480
182	Asp	Gly	His	Ala	Val	Gln	Ala	Gly	Asn	Arg	Tyr	Ser	Ile	Ile	Gln	Gly
183					485					490					495	
184	Ser	Ser	Leu	Arg	Val	Asp	Asp	Leu	Gln	Leu	Ser	Asp	Ser	Gly	Thr	Tyr
185				500					505					510		
186	Thr	Cys	Thr	Ala	Ser	Gly	Glu	Arg	Gly	Glu	Thr	Ser	Trp	Ala	Ala	Thr
187			515					520					525			
188	Leu	Thr	Val	Glu	Lys	Pro	_	Ser	Thr	Ser	Leu		Arg	Ala	Ala	Asp
189		530	_			_	535		_			540	_			-
190		Ser	Thr	Tyr	Pro		Pro	Pro	Gly	Thr		Lys	Val	Leu	Asn	
191	545	_		_	•	550	_	_	_		555	_			_	560
192	Ser	Arg	Thr	Ser		Ser	Leu	Arg	Trp		Lys	Ser	GIn	Glu		Pro
193					565				_	570			_		575	_
194	Gly	Ala	Val		Pro	Ile	Ile	Gly		Thr	Val	Glu	Tyr		Ser	Pro
195	_	_		580	~-	_			585			_		590		1
196	Asp	Leu		Thr	GTÀ	Trp	Ile		Ala	Ala	His	Arg		GTÀ	Asp	Thr
197			595				_	600	_			_	605		_,	•
198	GIn	Val	Thr	тте	ser	ста		Thr	Pro	GTĀ	unr		Tyr	vaı	Pne	Leu
199		610		~ 3	•	 1	615	~ 1	-1-	a		620	~	a 1	-	~
200		Arg	ата	GIU	Asn		GIN	стÀ	тте	ser		PIO	ser	GTÀ	ьeu	
201	625	17 7	7 3.	T	m1	630	a 2	.7 -	3	ml	635	.7 -	x 7 -	0	a 7 -	640
202	asn	Val	тте	гÀ2		тте	GIU	АТа	ASP		ASP	АТА	ата	ser		ASN
203	A ~	T	Cc	A 7 -	645	A	ml	T	T	650	a1	T	Cc =	U - 1	655	T 0
204	ASP	Leu	ser		ата	arg	THE	Leu		mr	σтλ	гÀг	ser		GTU	Leu
205				660					665					670		

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206 207	Ile	Asp	Ala 675	Ser	Ala	Ile	Asn	Ala 680	Ser	Ala	Val	Arg	Leu 685	Glu	Trp	Met
208 209	Leu	His 690	Val	Ser	Ala	Asp	Glu 695	Lys	Tyr	Val	Glu	Gly 700	Leu	Arg	Ile	His
210	Тиг		Asp	λla	Sar	Val		Sar	ala	Gln	Туг		Ser	Tla	Thr	Val
211	705	Буз	YSP	AIG	Der	710	110	261	AIG	GIII	715	1110	561	110		720
212		Acn	Ala	Sor	λla		Sor	Dha	Val	Val		Aen	T 011	Tue	Luc	
213	Mec	ASP	ALG	Ser	725	GIU	Ser	File	Val	730	GLY	ASII	пец	цуз	735	ı yı
214	mhr	Tue	Tyr	al		Dho	Lou	Thr	Dro		Dho	Glu	Thr	т1а		G) v
214	1111	пуъ	ıyı	740	FIIG	FIIE	Leu	1111	745	FILE	FIIE	GIU	1111	750	GIU	GIY
216	@1 n	Dro	Ser		802	T	mh ~	A 7 a		mb ~	Птт	C111	Acn	-	Dro	Sor
217	GIII	PIO	755	ASII	Ser	гур	1111	760	nea	1111	ıyı	GIU	765	Val	FIU	Ser
218	A 7 a	Dro	Pro	A co	Acn	T1.	al n		G1 11	Mot	TTT Y	Aan		Thr	λla	al v
219	мта	770	PIO	ASP	MSII	TTE	775	TTE	GIY	Mec	TYL	780	GIII	1111	ATG	GIA
220	m~~		Arg	m~~	mb ~	Dro		Dro	802	al n	uic		Acn	<i>a</i> 1	Acn	Lou
	_	Vат	Arg	Пр	1111	790	PIO	PIO	Ser	GIII	795	птэ	MSII	сту	MSII	800
221 222	785	a1	Tyr	T	т1.		U a I	Cor	A 7 a	~1		mb ~	Wat	T ***	Val	
	Tyr	GIŊ	Tyr	гåг		GIU	νат	Set	Ата		ASII	THE	Met	гåз		rea
223			M-+	mb	805		.1.	mb	mh	810	Ca.	v. l	T 011	T 011	815	3.50
224	Ата	ASN	Met		Leu	ASN	АТА	Thr		Thr	ser	vaı	Leu		ASI	ASN
225	T	mb	mb	820	.1.		M	0	825	3	T	1	C	830	mb	T
226	Leu	THE	Thr	GIY	ATA	vат	Tyr		val	Arg	reu	ASI		Pne	THE	гаг
227		~ 1	835	al	D	m	a	840	D	T1 -	a	T	845 Dha	M -4		D==
228	АТА		Asp	GTA	PIO	Tyr		ràs	PIO	тте	ser		Pne,	мет	Asp	Pro
229		850	** !				855	•		•••	D	860	~ 1	m1		
230		HIS	His	vaı	HIS		Pro	arg	АТА	HIS		ser	GTA	Thr	HIS	
231	865	•		~3	~ 1	870	•		m)		875	•	•	~1	•	880
232	ста	arg	His	GIU	_	GIN	Asp	Leu	Thr	_	HIS	Asn	Asn	GTÀ		тте
233			~-3	_	885	_			-1	890			m1		895	
234	Pro	Pro	Gly		тте	Asn	Pro	unr		HIS	гàг	гàг	Inr		Asp	Tyr
235	•	~	~ 1	900	m	•	14-4		905		~	- 1 -		910	•	**-1
236	Leu	ser	Gly	Pro	Trp	Leu	мет		Leu	vaı	Cys	тте		Leu	Leu	Val
237	-		915	~				920		7	m	5 1	925		T	***
238	Leu		Ile	ser	АТА	Ата		ser	мет	vaı	Tyr		гÀг	Arg	гåг	HIS
239	a 1	930	ml	T	a 1		935	TT 2		~	**- 7	940	~		3	61
240		мес	Thr	гÀг	GIU		GTÅ	HIS	Leu	ser		vaı	ser	ASP	ASI	
241	945	m1		T	3	950	3	a	T	a 1	955	T	m	71.	1	960
242	тте	Thr	Ala	Leu		тте	ASN	ser	гÀг		Ser	ren	Trp	тте	_	HIS
243	***	3	a 1	m	965	mb		3	mb	970	T	3	C	a1	975	Co. w
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246	GIU	per	Lys							Ser					Tyr	ASII
247		~~ -													3	T 011
248	Asn		Asp	GTÅ	GIY	Thr			Ата	GIU	vaı			Arg	Asn	Leu
249	m\	1010				a	1015		a	D		1020		ml	D	
250			Phe	Tyr	Asn			rys	ser	Pro	_		Pro	Thr	Pro	-
251	1025		m1		-1-	1030		m\	a	a	1035		m\	a	ml	1040
252	АТА	Thr	Thr	мет			GTA	unr	ser			GIU	Thr	cys		
253		-1			1045			-		1050			•••	~	1055	
254	Tnr	Thr	Ser			АТА	Asp	гÀг			GТĀ	Thr	HIS			Tyr
255	~ .	•		1060		~7	~7		1065					1070		~
256	ser	Asp	Ala		Ala	GTÀ	GIN			АТа	val	Pro			гÀг	ser
257			1075		_	_		1080			_		1085		-1	
258	Asn	Tyr	Leu	GIn	Tyr	Pro	Val	GLu	Pro	ITe	Asn	Trp	ser	GLu	Phe	Leu

SEQUENCE VERIFICATION REPORT PATENT APPLICATION US/08/971,172

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